



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive



**National Ambulance Service (NAS)**  
**Ambulance Operations Procedure**  
**Transportation of patients suffering from confirmed**  
**Ebola Virus Disease**

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## **1.0 POLICY STATEMENT**

- 1.1 The National Ambulance Service (NAS) is committed to providing the resources and support systems required to promote quality patient care and provide a safe environment for staff, patients, visitors and others affected by the work of the Service. This commitment is endorsed by the introduction of this Procedure.

## **2.0 OVERVIEW/PURPOSE**

- 2.1 Viral Haemorrhagic Disease includes numerous zoonotic diseases, all of which may cause a severe haemorrhagic syndrome in humans. These include Lassa, Ebola (EVD), Marburg and Crimean/Congo Fevers
- 2.2 These diseases are the subject of Health Protection Surveillance Centre guidelines, and as such dictate strict compliance with this nationally agreed Procedure.
- 2.3 The National Emergency Operations Centre (NEOC) will be the conduit for requests from the National Isolation Unit (NIU), Mater Hospital for the transportation of patients to the Unit.
- 2.4 Where a request is made from the NIU to the National Ambulance Service for the transfer of a patient with confirmed EVD, from a medical facility to the NIU, the NAS Incident Response Team will be tasked with this transfer.
- 2.5 The St. Bernard Ward at the Mater Hospital Dublin has been dedicated the National Isolation Unit and is the only hospital where patients with confirmed Ebola Virus Disease will be conveyed directly. The entrance to this unit is on Berkeley Road. The patient will not be brought to the Emergency Department.
- 2.6 On arrival at the National Isolation Unit An Garda Síochána will provide a cordon area. Once the ambulance escort enters this area, An Garda Síochána will ensure the ambulance is secure whilst the patient is being transferred to the NIU.
- 2.7 When the patient has been transferred into the NIU, the crew will return to the ambulance and remove the vehicle to the decontamination area off the North Circular Road.
- 2.8 Appendix IV of this document specifically covers the repatriation of a confirmed EVD patient from Dublin Airport to the National Isolation Unit.

## **3.0 SCOPE**

- 3.1 This Policy applies to all NAS staff, but particularly members of the Incident Response Team.
- 3.2 This Policy is a specific Procedure relating to the transport of a patient suffering from confirmed Ebola Virus Disease from a referring hospital to the National Isolation Unit by NAS Vehicle. It specifically refers to inter-hospital transfers and transfers of repatriated patients from outside the country, who may require transport from an Irish airport to the NIU.

## 4.0 LEGISLATION/OTHER RELATED POLICIES

- A. National Ambulance Service Staff Induction Process
- B. National Ambulance Service Parent Safety Statement
- C. PHECC Training and Education Standards
- D. Safety, Health and Welfare at Work Act 1989 and 2005
- E. Safety, Health and Welfare at Work (General Regulations) 2007
- F. Ambulance Service Guidelines for Situations Associated with Biological Threats
- G. Policy - NASP003 - Dress and Personal Appearance at Work
- H. Procedure – NASOE001 – Personal Protection Equipment Kit
- I. Procedure – NASOP002 – Daily Vehicle Inspection and Inventory Check
- J. HSE Infection Control Guideline Manual 2010
- K. Policy – NASP001 – Control of Infection and Communicable Diseases
- L. The Management of Ebola Virus Diseases in Ireland (2012)
- M. Clinical Advisory Ebola Virus Disease-Control, Medical Director August 2014
- N. Clinical Advisory Ebola Virus Disease-Practitioners, Medical Director August 2014
- O. EPRR CRG Opinion on Appropriate Emergency Department Care for Suspected or Confirmed Ebola Patients 24th October 2014
- P. Guidance Note H1402 – Packaging and Transport of waste from suspect and confirmed cases of the Ebola Virus

## 5.0 GLOSSARY OF TERMS AND DEFINITIONS

- **OSRM** Operational Support and Resilience Manager
- **VHF** Viral Haemorrhage Fever
- **NIU** National Isolation Unit
- **QHSC** Quality, Health and Safety Committee
- **NEOC** National Emergency Operations Centre
- **ETA** Estimate Time Arrival
- **IRT** Incident Response Team
- **IsoArk** Self contained, stretcher mounted isolation unit

## 6.0 ROLES AND RESPONSIBILITIES

### 6.1 MANAGERIAL RESPONSIBILITIES

- 6.1.1 The Operational Support and Resilience Manager has executive responsibility for implementation of this Procedure.
- 6.1.2 The Quality, Safety and Risk Manager in each NAS Area is the lead Manager for Infection Control and is responsible for the ongoing development of Infection Prevention/Control processes within the NAS and accountable for ensuring best practice regarding infection prevention/control and control of communicable diseases.
- 6.1.3 Quality, Health and Safety Committees (QHSC) in consultation with the Infection Prevention/Control Service will be responsible for ensuring that procedures are in place and working effectively.
- 6.1.4 It is the responsibility of all Managers to ensure the implementation of this policy throughout their areas of responsibility.

- 6.1.5 It is the responsibility of the Education and Competency Assurance Team to ensure that all records relating to training resulting from this Procedure are maintained and available for internal and external review.
- 6.1.6 It is the responsibility of the Manager of the Incident Response Team to undertake a monthly Quality Audit to ensure equipment boxes are stocked and available.
- 6.1.7 All staff listed in section 3.1 of the policy is accountable for adhering to this policy in the execution of their duties.

## **6.2 COMMUNICATION WITH STAFF**

- 6.2.1 Communication with staff regarding potential infection risks is very important. Staff must understand the risk associated with an Ebola Virus Disease patient once the infection is being considered.
- 6.2.2 The virus may be present:
  - A. Blood
  - B. Body fluid including urine
  - C. Contaminated equipment and instruments
  - D. Waste
  - E. Contaminated clothing/surface
- 6.2.3 Exposure may also occur:
  - A. Directly through exposure to blood or bodily fluids during invasive, aerosolising or splash inducing procedures
  - B. Indirectly through exposure to the environment, surfaces, equipment or clothing contaminated with droplets of blood or bodily fluid

## **7.0 INITIAL NAS RESPONSE**

- 7.1 On receiving the call from the National Isolation Unit, IRT staff will be notified via the team's group text alert system. IRT members will provide the duty IRT manager, named in the alert text, their availability for deployment.
- 7.2 The IRT manager will liaise with the NIU with regard to the level of isolation required for the patient.
- 7.3 If required the IsoArk isolation unit will be retrieved from the storage facility at Swords Ambulance Station by the IRT manager or another designated staff member.
- 7.4 The IRT crew for this call will consist of the following:
  - 1. One team member who will drive and have no contact with the patient.
  - 2. Two team members who may interact with the patient and medical team.
  - 3. One IRT team manager who will liaise with transferring hospital, IRT team, An Garda Síochána at the local level and the NEOC.
  - 4. One Team member driving a second emergency ambulance to be part of the convoy in the event of a breakdown
  - 5. The activated members of the IRT will then be directed to an agreed NAS Rendezvous point 1. This will allow the IRT to prepare themselves and the ambulance for the transportation of the patient. The nearest available Manager of the IRT will also be dispatched, with appropriate equipment to rendezvous with the IRT, the IRT should use an Emergency Ambulance. For critical care transfers the team should use the MICAS vehicle or an Emergency Ambulance with an inverter and a critical care trolley.

- 7.5 This equipment should be sealed in a plastic crate and stored locally for immediate collection. The equipment contains:
- White Boiler Suits or hospital scrubs (Sizes 3XL,2XL, XL, L X 2)
  - Fluid repellent disposable Suit (with hood and feet) x 8(Sizes 3XL,2XL, XL, L X 2)
  - Box of disposable gloves (sizes XL, L & M)
  - Box of disposable gloves – extended sleeves (XL, L & M)
  - FFP3 face mask 6
  - Goggles x 6
  - Wellington Boots (Sizes 12 x 2, 10 x 2 and 8 x 2)
  - Disposable aprons x 6
  - Clinical waste bags x 1 roll
  - Cable ties x 6
  - Alcohol wipes (must have 70% alcohol content)
  - Hand Sanitiser x 2 (must have 70% alcohol content)
  - Detergent
  - Buckets or basin x 2
  - Disposable cloths x 12 (j-cloths type- 2 packets)
  - Heavy duty kitchen gloves x 4 pair (L and XL)
  - NaDCC disinfectant Titan Chlor Tablets 1.7g
  - 6 litre absorbent pads x 4
  - Blood Spill Kit x 2
  - Waste alleviation and gelling (WAG) bag x 2
  - Copy of *“NAS Transportation of patients suffering from suspected or confirmed Viral Haemorrhage Fever procedures”*
- 7.6 A Manager of the IRT will supervise and assist in the vehicle preparation process, which must include a further inspection of fuel level, roadworthiness checks etc., as well as on/off radio check with the NEOC. All unnecessary items of equipment should be removed from both the cab and the saloon compartments, and safely secured by the IRT for later collection.
- 7.7 The remaining core equipment must consist of:
- Defibrillator (and ancillary equipment, etc.)
  - Paramedic Pack/Advanced Paramedic (if appropriate)
  - Primary Response Bag
  - Resuscitation Bag
  - Suction Unit
  - One Trolley Cot with disposable sheets
  - One Carrying Chair
  - One Stretcher Canvas
  - Self glide Transfer Board/Sheets
  - Three Blankets
  - Six Vomit Bags
  - Six Clinical Waste Bags
  - 3 boxes of Disposable Gloves (small, med. Large)
  - Six Disposable Face Masks
  - Six Disposable Plastic Aprons

- Safety Eyewear (personal issue)
- Two Blue Tissue Rolls
- Detergent Cleaner – Clinell multi surface detergent wipes (full container)
- Alcohol Disinfectant – Purell Advanced (full container)
- Two ‘F’ Size Oxygen Cylinders + Flow meter + Masks
- Copy of NAS or local Infection Control manual
- Two ‘CD’ Oxygen Cylinders
- Patient Report Form, pens etc.

- 7.8 The level of any additional equipment should largely be established by the NEOC when the vehicle is requested, as this will be dependent upon the anticipated needs of the patient. If necessary, NEOC staff can liaise with the Medical Director or Deputy Medical Director or an Education and Competency Assurance Officer for further advice.
- 7.9 A medical escort team must accompany the patient if the patient’s clinical needs exceed the scope of practice of the IRT. They may wish to utilise their own items of equipment, so this too should be identified in a bid to avoid unnecessary duplication.
- 7.10 For critical care transfers, the medical escort will be provided from Consultants in Intensive Care Medicine from participating Dublin hospitals – if not available the escort must be provided by the referring hospital
- 7.11 However, if any doubt exists, the IRT staff must ensure that NAS emergency resuscitative equipment is carried as a minimum. It may be advisable to carry this equipment in a sealed bag and left sealed unless required.
- 7.12 The IRT staff must then remove all items of clothing apart from underwear/socks and put on the white boiler suit or hospital scrubs. The fluid repellent disposable gown must then be worn over the boiler suit or hospital scrubs, and fastened up to the neck. Staff should ensure that their hair is tucked inside the hood of the suit, use of a hair net or surgical cap may be required.
- 7.13 All articles of clothing, together with personal items, should be left with the IRT Manager in an appropriate storage container.
- 7.14 The IRT Manager will be the link person between the crew and the escorting Gardai and staff at the NIU on arrival at the Mater Hospital.
- 7.15 The IRT Manager will be part of the escort transporting the patient.
- 7.16 Once final checks have been completed, the crew should then plan their routes of travel for both journeys. The IRT staff will then be directed by the NEOC to rendezvous point 2 to leave liaise with An Garda Siochána (see 12.1 I)

## **8.0 ACTION ON MEETING THE PATIENT**

- 8.1 Prior to entering the patient's location, the IRT staff must don the appropriate Personal Protective Equipment to aid the removal of the patient to the ambulance. (See Appendix II)
- 8.2 Following introductions and explanations a surgical mask should be placed on the patient if the patient has respiratory symptoms.
- 8.3 If required the patient will be placed into the IsoArk isolation unit for transport.
- 8.4
- 8.5 Care must be taken to treat any spillage of blood or body fluids immediately, using detergent, disinfectant and absorbent paper rolls if necessary.



- 8.6 In addition, care must also be taken to ensure that all items of ambulance equipment are removed from this location. This includes the removal of any materials that have been used for cleaning spillages etc., which must be stringently collected as clinical waste.
- 8.7 The IRT staff should attempt to keep well-wishers at a distance whilst transferring the patient to the ambulance, particularly where physical contact is anticipated. The assistance An Garda Síochána may be required for this activity.
- 8.8 Relatives are not to be transported in the NAS vehicle to the National Isolation Unit, except in the circumstances where the patient is a child. In these circumstances the relative should also wear a surgical mask, apron and gloves.
- 8.9 Before leaving the transferring hospital the IRT team member driving should liaise with the Senior Garda in charge of the Garda Escort for direction regarding routes and speed direction.
- 8.10 The IRT Manager will contact NEOC and provide an ETA to hospital.
- 8.11 The IRT Manager will form part of the ambulance escort to the NIU.

## **10.0 ACTION EN-ROUTE TO HOSPITAL**

- 10.1 The IRT staff should be accompanied by a member of the medical staff from the NIU, Intensive Care Consultants or the transferring hospital.
- 10.2 Full infection control measures should be implemented for these medical personnel. Items such as gown, gloves, face mask (FFP3 or equivalent), eye glasses, footwear, etc.
- 10.3 The patient should be monitored at regular intervals as determined by the accompanying medical personnel. Observations should be done as required, unless there is a clinical deterioration.
- 10.4 In the event of the patient deteriorating significantly or suffering a cardiac arrest, the following actions are appropriate:
  - CPR is futile and not supported
  - Ventilatory and airway intervention are unlikely to be appropriate
  - Fluids for hydration are appropriate
  - Anti-emetics such as Ondansetron may be beneficial if IV/IO access are available but would not justify obtaining access just for medication administration
  - Other care as required to maintain comfort and dignity until prompt expert help arrives or the patient is safely transported.
- 10.5 Other than for emergency evacuation purposes, the crew must not leave the vehicle under any circumstances. This Procedure must also apply to 'running calls', where a further NAS response should be summoned via the radio.

## **11.0 BREAKDOWN PROCEDURES**

- 11.1 In the event of a breakdown, the crew will notify the NEOC.
- 11.2 The crew will transfer the patient to the second emergency ambulance in the convoy and continue to the National Isolation Unit.
- 11.3 Arrangement will be made to bring the defective vehicle to a secure and isolated location where decontamination of the vehicle will take place. This will be determined after due consultation with the crew and overseeing IRT Manager, together with clinical judgment from the Consultant at the National Isolation Unit.



## 12.0 ROLE OF National Emergency Operations Centre (NEOC)

12.1 On receipt of a call from the National Isolation Unit with regard to the transfer of a patient to the National Isolation Unit: they will carry out the following:

- A. Contact the IRT Duty Officer in the following order:
  1. Colm Megan
  2. Darryl Coen
  3. Lawrence Kenna
  4. William Howard
- B. Send a group text to the IRT, group text will read as follows “Amber Alert please text IRT duty officer availability status immediately”.
- C. If a critical care transfer, contact on-call ICU Consultant (see separate guidance document on this)
- D. Contact Ambulance Officer Operations Manager to arrange for an emergency vehicle to be made available
- E. Contact Operations Performance Manager or Area Operations Manager to inform them of activation of IRT
- F. Contact the Medical Director or Deputy Medical Director and inform them of the nature of the call and activation of the IRT.
- G. Contact An Garda Siochána Command and Control Centre and arrange for an ambulance escort. The code word for this escort is “ELM”, which will be used in all radio communications for the duration of the escort.
- H. The National Ambulance Service will provide An Garda Siochána with a point of contact (Control Manager) who will be the link person for the duration of the call.
- I. Arrange (with An Garda Siochána) for an agreed rendezvous point (Rendezvous Point 2) for the ambulance crew and escorting Gardai offsite, before patient contact. This will allow for briefing on route, speed etc.
- J. The NEOC will pre-alert the National Isolation Unit that the crew have left scene and are en route. This will be done via the internal switchboard (01-8308969) requesting the National Isolation Unit to alert the appropriate specialist staff that the NAS vehicle is en route.
- K. The backup numbers direct to the National Isolation Unit are: **01-8032562 or 01-8032563**
- L. The Garda Escort will remain with the ambulance until the ambulance is parked up at the Mater Hospital and decontamination is complete.
- M. Stand Down arrangement will be made between the Garda in charge of the escort and member in charge of the ambulance. Stand Down of escort will be notified to the NEOC.
- N. Note: An Garda Siochána will be notified directly by the National Isolation Unit in relation to the transfer and provided a contact person in the NIU for the duration of the operation.
- O. The NEOC will maintain detailed records of all confirmed EVD transportations.

## 13.0 ACTION OF CREW ON ARRIVAL AT THE NIU – BERKELEY ROAD

- 13.1 Having arrived at the Mater Hospital, the IRT staff and medical team will be met at the Berkeley Road entrance by specialist hospital staff.
- 13.2 IRT member driving will remain in the front of the ambulance.
- 13.3 NIU Staff will move to the rear of the vehicle and await IRT staff to open rear door.

- 13.4 Patient will be moved from the ambulance and handed over to NIU staff.
- 13.5 IRT staff will not enter the NIU for walking or wheelchair patients.
- 13.6 If the patient is to be moved by stretcher, the patient will be unloaded from the ambulance and transferred into the NIU.
- 13.7 NIU staff will ensure that the IRT staff are guided through the unit to minimise contamination trail.
- 13.8 If the IsoArk unit is being used IRT staff will assist in the removal of the patient from the device.
- 13.9 Patient will be placed onto NIU bed.
- 13.10 A verbal and written report will be given to the NIU staff
- 13.11 No copy of the PCR should be retained by the crew. (the crew should re-record a new PCR for this patient when all decontamination process have been carried out)
- 13.12 IRT staff will return with the stretcher to the ambulance and will be driven to the cleansing area in the Mater Hospital. (Old ED yard).
- 13.13 They will be met by an IRT Manager who will supply the necessary materials for cleaning and disinfection.
- 13.14 The IsoArk unit will be packaged and made ready for formal decontamination by the specialist agents.
- 13.15 The IRT manager will arrange for transport of the device to the agents, Anderco Cork
- 13.16 When finished cleaning and disinfecting the vehicle, the crew should remove their outer PPE (Appendix III), and secure it in a clinical waste bag. This should be given to staff from the National Isolation Unit for disposal.
- 13.17 They will retrieve their uniforms from the IRT Manager and will be directed to a shower room within the National Isolation Unit.
- 13.18 The IRT staff will wash themselves thoroughly, including shampooing their hair and change into their uniform
- 13.19 Once the IRT staff and Manager are satisfied that any outstanding matters have been addressed, they should report their status to the NEOC.
- 13.20 The IRT staff will then go to an Ambulance Station holding the remaining items of equipment, in order for the vehicle to be fully replenished.
- 13.21 Once this has been completed, the vehicle will be available to return to normal operational duties.

## 14.0 VEHICLE CLEANING AND DISINFECTION PROCEDURES

- 14.1 On arrival at the area for decontamination at the Mater Hospital, all blankets, sheets, consumables should be placed in double bagged clinical waste bags as per the Guidance Note H1402 *"Packaging and Transport of waste from suspect and confirmed cases of the Ebola Virus."*
- 14.2 The outer PPE of the IRT team should be removed. The IRT crew may shower at this stage before donning new PPE as per the donning and doffing guidelines.
- 14.3 At this stage decontamination of the vehicle may take place.
- 14.4 All exterior work surfaces, fixtures and fittings, stretcher, seats, handrails and equipment should be washed with water and detergent.

- 14.5 The doors and windows of the ambulance should be left open to assist drying.
- 14.6 It is imperative that all surfaces are thoroughly cleaned and disinfected, irrespective of whether any direct contamination of blood or body fluids has occurred.
- 14.7 The cloths should be placed in a yellow clinical waste bag. Dry off all equipment with paper towels and dispose of all used paper towels in yellow clinical waste bags.
- 14.8 Ensure proper personal protective equipment is worn while carrying out the cleaning procedures.
- 14.9 Next clean the floor, stretcher mattress and work surfaces with new clean cloths using Titan Chlor Plus using the following strength Outbreak disinfection 10000ppm (ten tablets per litre of water)
- 14.10 Leave for 30 minutes to dry
- 14.11 Re-wash down work surfaces, stretcher, seats, handrails and equipment with detergent and cloths. Dry off all equipment with paper towels and dispose of all used paper towels in yellow clinical waste bags.
- 14.12 All clinical waste, used PPE, and cleaning cloths should double bagged in yellow clinical waste bags and placed in clinical waste bins as per the Guidance Note H1402 *"Packaging and Transport of waste from suspect and confirmed cases of the Ebola Virus."*
- 14.13 The Mater Hospital will supply NAS with 30/60 litre rigid clinical waste bins.
- 14.14 When the crew have finished decontaminating the vehicle, they should remove their PPE and place it in clinical waste bags.
- 14.15 The IRT crew should then shower and dress in standard working uniform.
- 14.16 A second option for decontamination of the vehicle is that a second team of IRT staff will responsible for decontamination of the vehicle. This will be decided on the day, in consultation with the IRT Manager, Operations Performance Manager and Medical Director, if available.

## 15.0 MANAGEMENT OF BLOOD SPILLS

- 15.1 In the event of a blood spill, apply full PPE, cover the spill with absorbent paper towels, and discard towels into clinical waste bags. The contaminated area should again be liberally covered with 10000ppm hypochlorite solution and left for 2 minutes before wiping up with paper towels.
- 15.2 The surface should then be wiped down with detergent wipes.
- 15.3 Discard all paper towels and PPE into clinical waste bags
- 15.4 For larger spills, cover the area with hypochlorite granules. If possible ensure good ventilation in the area. Allow 2-3 minutes for the granules to gel, then using scoop from Spill Kit remove the gel, place in yellow clinical waste bag.
- 15.5 Clean area with detergent wipes followed by hypochlorite solution 10000ppm as above

## 16.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

- 16.1 The use of PPE when dealing with patients who have suspected or confirmed EVD is very important. All staff should be very familiar with the correct sequence for the donning and removal of PPE in order to prevent contamination of the face, mucous membranes and clothing

- 16.2 The use of the “buddy system” will ensure this is carried out correctly. When donning or removing PPE, a second person should guide the individual who is donning/removing PPE. PPE for the buddy is minimal: scrubs/apron/gloves
- 16.3 Keep hands in front of body once PPE is on.

### Gloves

- 16.4 Non-latex gloves should be applied, removed and disposed of in line with the donning and doffing guidelines. Double Gloving is advised at all stages of patient contact. Apply a second pair of gloves over the first, ensuring the second pair are long enough to cover the cuffs of the gown.

### Clinical and Environmental Waste

- 16.5 All waste including, discarded PPE, clinical waste, disposable equipment, used cleaning material (paper towels, cloths, gels), sheets and blankets must be double bagged in yellow clinical waste bags and placed in a clinical waste bin in accordance with the Guidance Note H1402 “*Packaging and Transport of waste from suspect and confirmed cases of the Ebola Virus.*”
- 16.6 *Sharps must be placed in sharps bins before sealing and placing into a double bagged yellow clinical waste bags.*

### 17.0 ROLE OF INCIDENT RESPONSE TEAM MANAGER

- 17.1 Following notification from the NEOC, the IRT Manager should carry out the following duties:
- A. Collect crate of PPE from the storage area at Swords Ambulance Station.
  - B. Consider the need for the IsoArk isolation unit following consultation with the NIU Consultant.
  - C. Liaise with the transporting crew at a nominated Station and arrange for the IRT staff to prepare themselves and their vehicle for the patient transportation
  - D. Take the staff uniform and disinfection equipment in the PPE crate and rendezvous with the crew at the National Isolation Unit.
  - E. Liaise with the staff at the National Isolation Unit to facilitate the smooth transfer of the patient
  - F. Liaise with the staff in the decontamination area of the Mater Hospital when the patient has been transferred to the National Isolation Unit.
  - G. Supply the crew with cleaning and disinfection equipment.
- 17.2 The IRT Manager will then oversee the remainder of the cleaning and disinfection procedure.
- 17.3 The IRT Manager will accompany the transfer vehicle during all of the transportation process.

## 18.0 POST TRANSPORTATION PROCEDURES

- 18.1 IRT crews will receive initial advice and support from hospital staff, together with any treatment deemed necessary.
- 18.2 The NEOC will maintain detailed records of all EVD transportations. It is therefore essential that crews keep the NEOC updated with all developments as they occur, which should also include details of any advice and/or treatment provided by the receiving hospital.
- 18.3 Such information must also be discussed by both the NEOC and the IRT Manager, in order that a clear plan of communication and support can be established for the individual crew members involved.
- 18.4 The initial responsibility for formulating and actioning this plan will rest with the relevant IRT Manager responsible for the staff involved who will ensure that all relevant details are passed to the local Occupational Health Service. Consequently, all relevant details should be passed to the Incident Response Team manager at the earliest opportunity.
- 18.5 As soon as circumstances allow, the responsibility for managing subsequent communication and support measures will be by the relevant Ambulance Officer - Operations responsible for the staff involved.
- 18.6 He/she will continue to liaise with the crew, as well as co-ordinating the involvement of the Occupational Health Service, and any other associated authority.
- 18.7 Crews concerned about their health following an infectious removal can seek advice at any time from the Occupational Health Service.
- 18.8 A database detailing NAS personnel who have transported patients with suspected Ebola Virus Disease patients should be maintained at the relevant NAS Area Headquarters.

## 19.0 IMPLEMENTATION PLAN

- 19.1 On approval, this Procedure will be circulated electronically to all Managers, Supervisors and Staff
- 19.2 This Procedure will be available electronically in each Ambulance Station for ease of retrieval and reference
- 19.3 Each Operational Support and Resilience Manager will ensure that the Manager/Supervisor responsible for updating Policies and Procedures will return the Confirmation Form to NAS Headquarters to confirm document circulation to all staff. The Incident Response Team will train on a quarterly basis, specifically to ensure competence in the procedures required to carry out this specialised role.
- 19.4 The IRT will have access to appropriate PPE and vehicle required for this training
- 19.5 The IRT Manager will maintain a record of all staff who have participated in this training.
- 19.6 This level of preparedness will be maintained until directed by the Medical Director of the NAS.

## 20.0 REVISION AND AUDIT

- 20.1 The effectiveness of infection control measures will be monitored by Quality, Health and Safety Committees in consultation with the Infection Control Managers to ensure changing circumstances do not alter risk priorities.

- 20.2 The NAS Medical Directorate who are responsible for ensuring the maintenance, regular review and updating of this policy.
- 20.3 Revisions, amendments or alterations to the policy can only be implemented after consideration and approval by the Director, following consultation with the National Isolation Unit.
- 20.4 Compliance with this policy will be assessed through the ongoing supervision of staff at all times.
- 20.5 It is in the interest of all staff members to ensure that this policy is adhered to in order to enhance staff safety.
- 20.6 Any incident involving Ebola Virus Disease should undergo a specific review with assistance from the HSE Quality and Patient Safety Directorate and Infection Control Managers.

**Revision History:** (This captures any changes that are made to a SOP when it has been revised. This may be placed at the back or close to the front of the document according to local preference.)

No	Revision No	Date	Section Amended	Approved by
1	4	03/01/17	Document amended according to changes within the NAS	NAS Leadership Team

## 21.0 REFERENCES

None applicable

## 22.0 APPENDICES

- **Appendix I** – Infectious Disease P.P.E. Donning
- **Appendix II** - Infectious Disease P.P.E. Doffing
- **Appendix III** – Procedures specific to transfer of repatriated confirmed EVD from Dublin Airport to the National Isolation Unit Infectious Disease P.P.E.
- **Appendix IV** - Procedure – Acknowledgement Form

## 23.0 Signatures of Approval

All persons must sign and date this page after they have read and understood the Standard Operation Procedure/Policy.



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National Ambulance Service Medical Director  
On behalf of the National Ambulance Service

Date **3<sup>rd</sup> January 2017**



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National Ambulance Service Director  
On Behalf of the National Ambulance Service

Date **3<sup>rd</sup> January 2017**



## Infectious Disease Personal Protective Equipment Donning

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_      **Time:** \_\_\_\_\_      **Incident No:** \_\_\_\_\_  
**Crew:** \_\_\_\_\_ **Pin:** \_\_\_\_\_/\_\_\_\_\_  
 \_\_\_\_\_ **Pin:** \_\_\_\_\_  
**Incident supervisor:** \_\_\_\_\_ **Pin:** \_\_\_\_\_

### *Donning Personal Protective Equipment - Viroguard without feet*

	<i><b>ACTION</b></i>	<i><b>Completed</b></i>
<b>1</b>	Remove personal clothing and items	
<b>2</b>	Inspect PPE prior to donning	
<b>3</b>	Remove shoes	
<b>4</b>	Perform hand hygiene	
<b>5</b>	Put on coverall	
<b>6</b>	If weather clement - put back on shoes	
<b>7</b>	If weather inclement - put on wellington boots	
<b>8</b>	Extend legs of coverall over wellington boots	
<b>9</b>	Put on boot covers and extend to top of shins	
<b>10</b>	Put on FFP3 mask	

<b>11</b>	Put on Goggles	
<b>12</b>	Place coverall hood up and apply seal	
<b>13</b>	Place hood over coverall hood and drape over shoulders	

<b>14</b>	Put on inner gloves and ensure under cuff	
<b>15</b>	Put on apron	
<b>16</b>	Put on Face Shield/Visor	
<b>17</b>	Put on outer gloves and ensure gloves extend over cuff	
<b>18</b>	Inspect PPE prior to patient contact	

<b>Comments:</b>		

## Infectious Disease Personal Protective Equipment DOFFING

<b><i>Doffing Personal Protective Equipment - Viroguard without feet</i></b>		
<b><i>ACTION</i></b>		<b><i>Completed</i></b>
<b>1</b>	If available, step into XL clinical waste bag	
<b>2</b>	Inspect PPE	
<b>3</b>	<b><i>Disinfect</i></b> outer gloves	
<b>4</b>	Remove apron	
<b>5</b>	Inspect PPE	
<b>6</b>	<b><i>Disinfect</i></b> gloves and top of disinfectant dispenser	
<b>7</b>	Remove outer gloves	
<b>8</b>	Inspect and <b><i>Disinfect</i></b> inner gloves	
<b>9</b>	Remove face shield/visor	
<b>10</b>	<b><i>Disinfect</i></b> inner gloves	
<b>11</b>	Remove hood ensuring to grasp at top of head.	
<b>12</b>	<b><i>Disinfect</i></b> inner gloves	
<b>13</b>	Break seal on coverall and up zip coverall fully	
<b>14</b>	Remove coverall hood from the head by grasping both sides, pulling the hood outwards, upwards and back over the head - ensure inside of hood is turned outward during process	
<b>15</b>	Extend arms behind and remove arms from coverall	
<b>16</b>	<b><i>Disinfect</i></b> inner gloves	
<b>17</b>	Remove the coverall and boot covers as one piece by bringing it down over the boots as far as the ankles.	

<b>18</b>	Step backward out of the boots onto a clean area (e.g. incontinent pads)	
<b>19</b>	Roll up the coverall and place it along with the boots into clinical waste bag	
<b>20</b>	If using XL clinical waste bag, step backward out of this bag onto a clean area, roll up the bag removing the air, and place it with its contents into a clinical waste bin	
<b>21</b>	<b>Disinfect</b> inner gloves and top of disinfectant dispenser	
<b>22</b>	Remove inner gloves	
<b>23</b>	<b>Disinfect</b> hands - use new dispenser if available	
<b>24</b>	Apply new gloves	
<b>25</b>	Remove goggles	
<b>26</b>	<b>Disinfect</b> gloves	
<b>27</b>	Remove FFP3 mask	
<b>28</b>	<b>Disinfect</b> gloves	
<b>29</b>	<b>Disinfect</b> top of disinfectant dispenser	
<b>30</b>	Remove gloves	
<b>31</b>	<b>Disinfect</b> hands	
<b>32</b>	With gloved hands dispose of dispenser along contaminated PPE	
	Signature: _____ Date: _____	

**Document Control No. 1 (to be attached to Master Copy)**

**NASCG014 Transportation of patients suffering from confirmed Ebola Virus Disease**

**Reviewer:** The purpose of this statement is to ensure that a Policy, Procedure, Protocol or Guideline (PPPG) proposed for implementation in the HSE is circulated to a peer reviewer (internal or external), in advance of approval of the PPPG. You are asked to sign this form to confirm to the committee developing this Policy or Procedure or Protocol or Guideline that you have reviewed and agreed the content and recommend the approval of the following Policy, Procedure, Protocol or Guideline:

**Title of Policy, Procedure, Protocol or Guideline:**

**NASCG014 Transportation of patients suffering from confirmed Ebola virus Disease**

I acknowledge the following:

- I have been provided with a copy of the Policy, Procedure, Protocol or Guideline described above.
- I have read Policy, Procedure, Protocol or Guideline document.
- I agree with the Policy, Procedure, Protocol or Guideline and recommend its approval by the committee developing the PPPG.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature (Block Capitals)

\_\_\_\_\_  
Date

**Please return this completed form to:**

**Name:** Niamh Murphy  
**Contact Details:** Corporate Office  
National Ambulance Service  
Rivers Building  
Tallaght Cross  
Dublin 24  
email [niamhf.murphy1@hse.ie](mailto:niamhf.murphy1@hse.ie)

**Document Control No. 2 (to be attached to Master Copy)**

**Key Stakeholders Review of Policy, Procedure, Protocol or Guidance  
Reviewer Statement**

**Reviewer:** The purpose of this statement is to ensure that a Policy, Procedure, Protocol or Guideline (PPPG) proposed for implementation in the HSE is circulated to Managers of Employees who have a stake in the PPPG, in advance of approval of the PPPG. You are asked to sign this form to confirm to the committee developing this Policy or Procedure or Protocol or Guideline that you have seen and agree to the following Policy, Procedure, Protocol or Guideline:

**Title of Policy, Procedure, Protocol or Guideline:**

**NASCG014 Transportation of patients suffering from confirmed Ebola Virus Disease**

I acknowledge the following:

- I have been provided with a copy of the Policy, Procedure, Protocol or Guideline described above.
- I have read Policy, Procedure, Protocol or Guideline document.
- I agree with the Policy, Procedure, Protocol or Guideline and recommend its approval by the committee developing the PPPG.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature (Block Capitals)

\_\_\_\_\_  
Date

**Please return this completed form to:**

**Name:** Niamh Murphy  
**Contact Details:** Corporate Office  
National Ambulance Service  
Rivers Building  
Tallaght Cross  
Dublin 24  
email [niamhf.murphy1@hse.ie](mailto:niamhf.murphy1@hse.ie)

**Document Control No. 3 Signature Sheet:**

(to be attached to Master Copy)

**Policy, Procedure, Protocol or Guideline:**

**NASCG014 Transportation of patients that are suffering from confirmed Ebola Virus Disease**

*I have read, understand and agree to adhere to the attached Policy, Procedure, Protocol or Guideline:*

<b>Print Name</b>	<b>Signature</b>	<b>Area of Work</b>	<b>Date</b>